

Claims

What is claimed is:

1. A method and system for geographically presenting and summarizing charge-card transactions and visually alerting the cardholder to sensitive transactions by transaction map(s) in charge-card billing statements, comprising:

Integration of a database technology, a geographic information system, and a rule system;

Summarizing all or a subset of all transactions by a map which displays geo-referenced points-of-charges;

Summarizing the transaction amounts by points-of-charges within the map;

Summarizing the number of transactions by points-of-charges within the map;

Summarizing the categorized transactions by points-of-charges within the map;

Summarizing the transactions with significant amounts charged by points-of-charges within a map;

Summarizing the local-area transactions within a map;

Summarizing the none-local-area transactions within a map;

Summarizing weekday transactions by points-of-charges within a map;

Summarizing weekend transactions by points-of-charges within a map;

Summarizing weekly transactions by points-of-charges within a map;

Above maps not summarized by points-of-charges but summarized by geographic unit.

Including the combination of any of above summary maps.

2. The apparatus as claimed in Claim 1, where said summary of transactions by points-of-charges within a map includes a map displaying symbols or text denoting the points-of-charges based on geo-referenced information about the transaction's or the merchant's street address, zip code, city, and state for each or some transactions at that place.
3. The apparatus as claimed in Claim 1, where said summary of transaction amounts by points-of-charges within a map includes a map displaying symbols or text at the geo-referenced points-of-charges, where the size, the shape, or the color of the symbols or the text itself reflects the total or a certain range of transaction amount at that place.
4. The apparatus as claimed in Claim 1, where said summary of the number of transactions by points-of-charges within a map includes a map displaying symbols or text at the points-of-charges, where the size, the shape, or the colors of the symbol or the text itself reflect the actual number or a certain range of numbers of transactions at that place.
5. The apparatus as claimed in Claim 1, where said summary of categorized transactions includes the categories of department store, grocery store, pharmacy, hotel, travel, restaurant, gas station, etc.

6. The apparatus as claimed in Claim 1, where said summary of sensitive transactions includes transactions with significant amount of charges, or the transaction is one among the top-n charges in this billing period.
7. The apparatus as claimed in Claim 1, where said summary of local and/or non-local transactions includes all places within or outside, respectively, of the cardholder's home area, as may be defined by address plus distance function, or any geographic unit, including zip code, phone number area, city or town, county, state, country, continent, etc.
8. The apparatus as claimed in Claim 1, where said summary of weekday transactions by points-of-charges within a map includes a map displaying symbols or text denoting the geo-referenced points-of-charges for transactions conducted on weekdays.
9. The apparatus as claimed in Claim 1, where said summary of weekend transactions by points-of-charges within a map includes a map displaying symbols or text denoting the geo-referenced points-of-charges for transactions conducted on weekends.
10. The apparatus as claimed in Claim 1, where said summary of weekly transactions contains a map displaying symbols or text where the size, the shape, or the color

of the symbol or text itself identify transactions that were conducted during the first week, second week, third week and fourth week of the billing period.

11. The apparatus as claimed in Claim 1, where said summary of transactions by geographic unit contains a map displaying these geographic units where the size, the shape, the color, the pattern, labeling text, or any combination thereof identify any of the transaction patterns as summarized in Claim 1 through 10 or combinations thereof.